Installing an Iron-enhanced Sand Filter

Clean Water Funds: 2012

Clean Water Grant	$158,800
Leveraged Funds*	$52,500
Total Project Budget	$211,300

* Leveraged Funds include

Targeted Water:
McKusick Lake and Lake St. Croix

Project Sponsor:
Brown's Creek Watershed District

Grant Period:
January 2012—December 2014

Project Contact:
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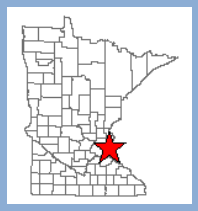

C12-209 - Clean Water Assistance

Project Narrative

In collaboration with the University of Minnesota St. Anthony Falls Laboratory, City of Stillwater and MN DNR Waters and Fisheries an iron-enhanced sand filter will be designed. This filter will remove approximately 118 pounds of total phosphorous per year from an area of Stillwater that ultimately drains to the St. Croix River, a national Wild and Scenic River that has a decling water quality trend.

The proposed design will reduce phosphorous from a contributing drainage area of 1,200 acres by harvesting stream water from an offline constructed settling pond. Stream flow will fill the settling pond to a designated elevation above the intake pipe at which time the pump will convey flow into the existing pretreatment cell of the pond. After pretreatment, the stormwater will flow through the vegetated swale, which will be retrofitted with an iron-enhanced sand filter, and discharge back to the tributary stream through a newly constructed outlet structure.

Proposed Outcomes:

Settler's Glen 5th Addition Iron Enhanced Sand Filter - McKusick Lake and Lake St. Croix

Proposed Reductions: 118 lbs/year Phospho-rus

Actual Outcomes:

Project in Progress

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